```
                                        H  5



FFFFFFFFFFFFFFF         111            111      XXX         XXX
FFFFFFFFFFFFFFF         111            111      XXX         XXX
FFFFFFFFFFFFFFF         111            111      XXX         XXX
FFF                  111111         111111      XXX         XXX
FFF                  111111         111111      XXX         XXX
FFF                  111111         111111      XXX         XXX
FFF                     111            111         XXX   XXX
FFF                     111            111         XXX   XXX
FFF                     111            111         XXX   XXX
FFFFFFFF.FFF            111            111            XXX
FFFFFFFFFFFF            111            111            XXX
FFFFFFFFFFFF            111            111            XXX
FFF                     111            111         XXX   XXX
FFF                     111            111         XXX   XXX
FFF                     111            111         XXX   XXX
FFF                     111            111      XXX         XXX
FFF                     111            111      XXX         XXX
FFF                     111            111      XXX         XXX
FFF                  111111111      111111111   XXX         XXX
FFF                  111111111      111111111   XXX         XXX
FFF                  111111111      111111111   XXX         XXX
```

```
_$25

Symb
----
IOC1
IO_C
IO_C
IO_D
IO_F
IO_S
KILL

KILL
KILL
LB_E
LB_D
LB_F
LB_K
LB_L
LOCA
LOCA
LOCK

LOCK
LOCK
LOCK
LOC_
LOC_
L_CO
L_CO
L_DA
L_DA
MAIN
MAKE
MAKE
MAKE
MAKE
MAKE
MAKE

MAKE
MAKE
MAP_
MAP_

MAP
MARK
MARK
MARK
MARK
MARK
```

F 7

FILEID**CHKDMO

```
  CCCCCCCC  HH      HH  KK      KK  DDDDDDDD    MM      MM    OOOOOO
  CCCCCCCC  HH      HH  KK      KK  DDDDDDDD    MM      MM    OOOOOO
CC          HH      HH  KK      KK  DD      DD  MMMM  MMMM  OO      OO
CC          HH      HH  KK      KK  DD      DD  MMMM  MMMM  OO      OO
CC          HH      HH  KK    KK    DD      DD  MM  MM  MM  OO      OO
CC          HH      HH  KK    KK    DD      DD  MM  MM  MM  OO      OO
CC          HHHHHHHHHH  KKKKKK      DD      DD  MM      MM  OO      OO
CC          HHHHHHHHHH  KKKKKK      DD      DD  MM      MM  OO      OO
CC          HH      HH  KK    KK    DD      DD  MM      MM  OO      OO
CC          HH      HH  KK    KK    DD      DD  MM      MM  OO      OO
CC          HH      HH  KK      KK  DD      DD  MM      MM  OO      OO        ....
CC          HH      HH  KK      KK  DD      DD  MM      MM  OO      OO        ....
  CCCCCCCC  HH      HH  KK      KK  DDDDDDDD    MM      MM    OOOOOO          ....
  CCCCCCCC  HH      HH  KK      KK  DDDDDDDD    MM      MM    OOOOOO          ....

LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II        SSSSSS
LL              II        SSSSSS
LL              II              SS
LL              II              SS
LL              II              SS
LL              II              SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

CH
VO

```
0 MODULE CHKDMO (
0                 LANGUAGE (BLISS32),
0                 IDENT = 'V04-000'
0                 ) =
1 BEGIN
1
1 !
1 !****************************************************************************
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1 !*                                                                          *
1 !****************************************************************************
1
1 !++
1 !
1 ! FACILITY:  F11ACP Structure Level 1
1 !
1 ! ABSTRACT:
1 !
1 !       This routine dismounts the volume in use if it should be.
1 !
1 ! ENVIRONMENT:
1 !
1 !       STARLET operating system, including privileged system services
1 !       and internal exec routines.
1 !
1 !--
1 !
1 !
1 ! AUTHOR:  Andrew C. Goldstein,  CREATION DATE:  29-Apr-1977  17:19
1 !
1 ! MODIFIED BY:
1 !
1 !       V03-026 HH0049          Hai Huang               16-Aug-1984
1 !               Call IOC$DALLOC_DMT to handle deallocation on dismount.
1 !
1 !       V03-025 HH0047          Hai Huang               13-Aug-1984
1 !               Correct IOC$DALLOC_DEV linkage (UCB address in R5).
1 !
1 !       V03-024 ACG0441         Andrew C. Goldstein,    9-Aug-1984  16:31
```

```
 1 !                 Rework dismount interlocking to eliminate races and
 1 !                 uninterlocked processing.
 1 !
 1 !         V03-023 ACG0438          Andrew C. Goldstein,    2-Aug-1984  11:39
 1 !                 Release cache locks when deallocating volume caches;
 1 !                 use central dequeue routine.
 1 !
 1 !         V03-022 LMP0275          L. Mark Pilant,         23-Jul-1984  14:08
 1 !                 Don't try to delete an uninitialized ACL.
 1 !
 1 !         V03-021 CDS0004          Christian D. Saether    20-Jun-1984
 1 !                 Temporarily raise the process diocnt around the
 1 !                 $QIO so that it will never be blocked.  Also raise
 1 !                 ASTCNT so it will not fail for that reason.
 1 !
 1 !         V03-020 CDS0003          Christian D. Saether     8-May-1984
 1 !                 Have UPDATE_DIRSEQ routine queue for exclusive
 1 !                 and cancel conversion of the volume lock to invalidate
 1 !                 the ucb dirseq counter.  Do not call the routine
 1 !                 from the check_dismount routine anymore.
 1 !
 1 !         V03-019 CDS0002          Christian D. Saether    22-Apr-1984
 1 !                 Use routine LOCK_COUNT.
 1 !
 1 !         V03-018 ACG0415          Andrew C. Goldstein,     9-Apr-1984  10:56
 1 !                 Interface change to ACL_DELETEACL
 1 !
 1 !         V03-017 HH0008           Hai Huang                9-Apr-1984
 1 !                 Change R2 thru R5 to NOPRESERVE in the linkage of the
 1 !                 EXE$DEAPGDSIZ routine.
 1 !
 1 !         V03-016 LMP0221          L. Mark Pilant,         27-Mar-1984  13:39
 1 !                 Change UCB$L_OWNUIC to ORB$L_OWNER and UCB$W_VPROT to
 1 !                 ORB$W_PROT.
 1 !
 1 !         V03-015 ACG0408          Andrew C. Goldstein,    23-Mar-1984  14:42
 1 !                 Add AST parameter so that impure storage is fully based
 1 !
 1 !         V03-014 CDS0011          Christian D. Saether     3-Mar-1984
 1 !                 Remove UNLOCK_XQP call.  It is done prior to this
 1 !                 point now.  Also KILL_CACHE happens in CLEANUP.
 1 !
 1 !         V03-013 CDS0010          Christian D. Saether    10-Feb-1984
 1 !                 Changes to deallocate AQB and buffer when last
 1 !                 dismount occurs on it.
 1 !                 Replace FLUSH_FID call with KILL_CACHE call.
 1 !
 1 !         V03-012 CDS0009          Christian D. Saether    29-Dec-1983
 1 !                 Use L_NORM linkage and BIND_COMMON macro.
 1 !
 1 !         V03-011 CDS0008          Christian D. Saether    16-Oct-1983
 1 !                 Dequeue blocking lock.
 1 !
 1 !         V03-010 CDS0007          Christian D. Saether    21-Sep-1983
 1 !                 Release locks in final stages of dismount so that
 1 !                 getlki check on volume lock is not confused by counting
 1 !                 an allocation lock for this request.
```

```
1 !
1 !       V03-009 PRD0039          Paul R. DeStefano         13-Sep-1983
1 !               Modified to no longer clear volume valid when dismounting
1 !               the volume.
1 !
1 !       V03-008 CDS0006          Christian D. Saether     18-Aug-1983
1 !               Release volume lock.
1 !               If this is the last volume lock to be released, then
1 !               clear the device lock value block.
1 !
1 !       V03-007 CDS0005          Christian D. Saether      2-Aug-1983
1 !               Remove reference to obselete RVX structure.
1 !
1 !       V03-006 CDS0004          Christian D. Saether      1-Mar-1983
1 !               Also need BYPASS privilege.
1 !
1 !       V03-005 LMP0071          L. Mark Pilant,           20-Jan-1983  13:09
1 !               Deallocate any ACL segments associated with directory FCB's
1 !               left in the cache.  This includes correctly calling
1 !               ACL_DELETEACL with the correct arguments.
1 !
1 !       V03-004 CDS0003          Christian D. Saether     13-Jan-1983
1 !               Save and restore both PCB$Q_PRIV and PHD$Q_PRIVMSK.
1 !
1 !       V03-003 CDS0002          Christian D. Saether     28-Dec-1982
1 !               Need PHY privilege for unload and available functions.
1 !
1 !       V03-002 CDS0001          C Saether                 31-Jul-1982
1 !               Change QIOW to QIO with completion AST.
1 !
1 !       V03-001 LMP0037          L. Mark Pilant,           28-Jun-1982  15:10
1 !               Remove the addressing mode module switch.
1 !
1 !       V02-007 ACG0226          Andrew C. Goldstein,     24-Nov-1981  22:16
1 !               Issue IO$_AVAILABLE on DISMOUNT/NOUNLOAD
1 !
1 !       V02-006 ACG0167          Andrew C. Goldstein,     16-Apr-1980  19:25
1 !               Previous revision history moved to F11B.REV
1 !**
1
1
1 LIBRARY 'SYS$LIBRARY:LIB.L32';
1 REQUIRE 'SRC$:FCPDEF.B32';
1
1
1 !
1 ! Part of this routine runs at IPL$_SYNCH, so it must be locked into the
1 ! working set.
1 !
1
1 LOCK_CODE;
1
1
1 FORWARD ROUTINE
1         CHECK_DISMOUNT  : L_NORM NOVALUE, ! check volume for dismount
1         UPDATE_DIRSEQ   : L_NORM;         ! bump volume directory sequence count
```

```
GLOBAL ROUTINE CHECK_DISMOUNT : L_NORM NOVALUE =

!++
!
! FUNCTIONAL DESCRIPTION:
!
!       This routine checks if the volume in use is marked for dismount and
!       idle. If so, it completes the dismount.
!
! CALLING SEQUENCE:
!       CHECK_DISMOUNT ()
!
! INPUT PARAMETERS:
!       NONE
!
! IMPLICIT INPUTS:
!       CURRENT_UCB: UCB of unit in use
!       CURRENT_VCB: VCB of volume in use
!
! OUTPUT PARAMETERS:
!       NONE
!
! IMPLICIT OUTPUTS:
!       NONE
!
! ROUTINE VALUE:
!       NONE
!
! SIDE EFFECTS:
!       Volume dismounted if appropriate
!
!--

BEGIN

LINKAGE
        DALLOC_DEV      = JSB (REGISTER = 4, REGISTER = 5)
                        : NOPRESERVE (3)
                          PRESERVE (2, 4, 5)
                          NOTUSED (6, 7, 8, 9, 10, 11);

LOCAL
        J,                                      ! loop index
        RVT_LENGTH,                             ! number of entries in RVT
        RVT             : REF BBLOCK;           ! address of RVT (or UCB if not a set)

EXTERNAL
        CTL$GL_PCB      : ADDRESSING_MODE(GENERAL),     ! PCB address
        CTL$GL_PHD      : ADDRESSING_MODE(GENERAL),     ! PHD address
        IOC$GL_AQBLIST  : REF BBLOCK ADDRESSING_MODE (ABSOLUTE); ! AQB listhead

BIND_COMMON;

LINKAGE
        DEAP = JSB (REGISTER=0, REGISTER=1) : NOPRESERVE (2,3,4,5);

EXTERNAL ROUTINE
```

```
2            CONV_ACCLOCK     : L_NORM,          ! convert/dequeue access lock.
2            LOCK_COUNT       : L_NORM,          ! Determine count of locks granted.
2            WAIT_FOR_AST     : L_NORM NOVALUE ADDRESSING_MODE (GENERAL),
2                                                ! exit thread until completion ast
2            CONTINUE_THREAD  : L_NORM NOVALUE ADDRESSING_MODE (GENERAL),
2                                                ! completion ast to resume thread
2            LOCK_IODB        : L_NORM,          ! lock I/O data base mutex
2            UNLOCK_IODB      : L_NORM,          ! unlock I/O data base mutex
2            DEQ_LOCK         : L_NORM,          ! dequeue a lock
2            DEALLOCATE       : L_NORM,          ! deallocate dynamic memory
2            SWITCH_CHANNEL   : L_NORM,          ! switch channels to specified UCB
2            SEND_ERRLOG      : L_NORM,          ! send message to error logger
2            EXE$DEAPGDSIZ    : DEAP ADDRESSING_MODE (GENERAL),
2                                                ! Deallocate paged pool.
2            IOC$DALLOC_DMT   : DALLOC_DEV ADDRESSING_MODE (GENERAL),
2                                                ! deallocate device
2            ACL_DELETEACL;                      ! Delete & deallocate ACL segments
2
2
2  ! Get the RVT address and iterate on the whole volume set, since deaccessing
2  ! a multi-volume file could make several volumes eligible for dismount. If
2  ! this is not a volume set we special case and exit.
2  !
2
2  J = 1;
2  RVT = .CURRENT_VCB[VCB$L_RVT];
2  IF .RVT NEQ .CURRENT_UCB
2  THEN RVT_LENGTH = .RVT[RVT$B_NVOLS];
2
2  DO
3      BEGIN
3
3  ! Declare most locals here for substantial improvement in storage allocation.
3  !
3      LOCAL
3          LOCKCOUNT        : INITIAL (0),     ! count of volume locks
3          STS,                                ! general status value
3          LKSTS            : VECTOR [6],      ! lock status block
3          AQB              : REF BBLOCK,      ! address of XQP AQB
3          CACHE            : REF BBLOCK,      ! address of volume cache
3          UCB              : REF BBLOCK,      ! local address of UCB
3          ORB              : REF BBLOCK,      ! local address of ORB
3          VCB              : REF BBLOCK,      ! local address of VCB
3          FCB              : REF BBLOCK,      ! local address of FCB
3          WCB              : REF BBLOCK;      ! local address of WCB
3
3
3      UCB = .RVT;                             ! assume not volume set
3
3      IF .UCB NEQ .CURRENT_UCB                ! get UCB if volume set
3      THEN UCB = .VECTOR [RVT[RVT$L_UCBLST], .J-1];
3
3  ! First check the mark for dismount bit.
3  !
3
3      IF .UCB NEQ 0
3      THEN IF .BBLOCK [UCB[UCB$L_DEVCHAR], DEV$V_DMT]
```

```
	THEN
	    BEGIN

! Do volume switch if necessary.
!

	    IF .UCB NEQ .CURRENT_UCB
	    THEN SWITCH_CHANNEL (.UCB);

! The volume is marked for dismount. The remainder of the tests and the
! dismount bit twiddling must be done interlocked.
!

	    LOCK_IODB ();
	    SET_IPL (IPL$_SYNCH);

	    ORB = .UCB[UCB$L_ORB];
	    VCB = .UCB[UCB$L_VCB];
	    IF .VCB[VCB$W_TRANS] NEQ 1
	    THEN
		UNLOCK_IODB ()
	    ELSE
		BEGIN

! The volume is marked for dismount and idle. Set the dismount in progress
! bit to stop all further activity.
!

		UCB[UCB$V_DISMOUNT] = 1;
		UNLOCK_IODB ();

! Make an error log entry to record the dismount.
!

		SEND_ERRLOG (0, .UCB);

! Release the device as specified in the applicable dismount request
! by issuing either an IO$_UNLOAD or an IO$_AVAILABLE function.
!

		BEGIN
		LOCAL
		    QIOSTAT,
		    PTR		: REF BBLOCK,
		    SAVE_PRIV	: VECTOR [4];

! Save and restore PHY_IO privilege around the QIO.
!

		PTR = .CTL$GL_PCB;
		PTR [PCB$W_DIOCNT] = .PTR [PCB$W_DIOCNT] + 1;
		PTR [PCB$W_ASTCNT] = .PTR [PCB$W_ASTCNT] + 1;
		SAVE_PRIV [0] = .(PTR [PCB$Q_PRIV]);
		SAVE_PRIV [1] = .(PTR [PCB$Q_PRIV]+4);

		BBLOCK [PTR [PCB$Q_PRIV], PRV$V_PHY_IO] = 1;
		BBLOCK [PTR [PCB$Q_PRIV], PRV$V_BYPASS] = 1;
  6
  6               PTR = .CTL$GL_PHD;
  6               SAVE_PRIV [2] = .(PTR [PHD$Q_PRIVMSK]);
  6               SAVE_PRIV [3] = .(PTR [PHD$Q_PRIVMSK]+4);
  6               BBLOCK [PTR [PHD$Q_PRIVMSK], PRV$V_PHY_IO] = 1;
  6               BBLOCK [PTR [PHD$Q_PRIVMSK], PRV$V_BYPASS] = 1;
  6
  6 ! Issue an unload function if unload was requested.
  6 !
  6
P 6               QIOSTAT = $QIO (
P 6                       CHAN = .IO_CHANNEL,
P 6                       ASTADR = CONTINUE_THREAD,
P 6                       ASTPRM = .BASE,
P 6                       EFN  = EFN,
P 6                       FUNC = (IF TESTBITSC (UCB[UCB$V_UNLOAD])
P 6                               THEN IO$_UNLOAD
P 6                               ELSE IO$_AVAILABLE)
  6                       );
  6
  6               (PTR [PHD$Q_PRIVMSK]) = .SAVE_PRIV [2];
  6               (PTR [PHD$Q_PRIVMSK]+4) = .SAVE_PRIV [3];
  6               PTR = .CTL$GL_PCB;
  6               PTR [PCB$W_DIOCNT] = .PTR [PCB$W_DIOCNT] - 1;
  6               PTR [PCB$W_ASTCNT] = .PTR [PCB$W_ASTCNT] - 1;
  6               (PTR [PCB$Q_PRIV]) = .SAVE_PRIV [0];
  6               (PTR [PCB$Q_PRIV]+4) = .SAVE_PRIV [1];
  6
  6               IF .QIOSTAT
  6               THEN WAIT_FOR_AST();
  5               END;            ! of block defining PTR, SAVE_PRIV, QIOSTAT
  5
  5 ! If this is a shared mount, raise the device lock to PW to get the
  5 ! value block, and prepare for writing it back. If the device is not
  5 ! shared, the lock is already at EX. If the device is not cluster
  5 ! accessible, there is no lock.
  5 !
  5
  5               IF (LKSTS [1] = .UCB [UCB$L_LOCKID]) NEQ 0
  5                   AND .UCB [UCB$L_PID] EQL 0
  5               THEN
  6                   BEGIN
P 6                   STS = $ENQ (LKMODE = LCK$K_PWMODE,
P 6                               LKSB   = LKSTS,
P 6                               EFN    = EFN,
P 6                               ASTADR = CONTINUE_THREAD,
P 6                               ASTPRM = .BASE,
P 6                               FLAGS  = LCK$M_CONVERT + LCK$M_SYNCSTS
  6                                        + LCK$M_NOQUOTA);
  6
  6                   IF .STS<0,16> EQL SS$_NORMAL
  6                   THEN WAIT_FOR_AST ();
  6                   IF NOT .STS
  6                   OR NOT .LKSTS
  6                   THEN BUG_CHECK (XQPERR, FATAL, 'Unexpected lock manager error');
  6
  6 ! Determine whether this is the last (only) lock for this volume.
```

```
6 !
6
6                       LOCKCOUNT = LOCK_COUNT (.VCB [VCB$L_VOLLKID]);
6                       END
5                   ELSE
5                       LOCKCOUNT = 1;              ! always 1 if allocated.
5
5 ! Now relock the I/O database and finish the dismount.
5 ! Mark the volume dismounted and disconnect the VCB from the UCB.
5 ! The high bit of the dirseq is masked off.  This tells RMS the lock
5 ! is disarmed.
5 !
5
5                   LOCK_IODB ();
5                   (UCB [UCB$W_DIRSEQ])<15,1> = 0;
5                   BBLOCK [UCB[UCB$L_DEVCHAR], DEV$V_MNT] = 0;
5                   BBLOCK [UCB[UCB$L_DEVCHAR], DEV$V_DMT] = 0;
5                   BBLOCK [UCB[UCB$L_DEVCHAR], DEV$V_SWL] = 0;
5                   UCB[UCB$W_REFC] = .UCB[UCB$W_REFC] - 1;
5                   UCB[UCB$V_DISMOUNT] = 0;
5                   UCB[UCB$L_VCB] = 0;
5                   ORB[ORB$L_SYS_PROT] = 0;
5                   ORB[ORB$L_OWN_PROT] = 0;
5                   ORB[ORB$L_GRP_PROT] = 0;
5                   ORB[ORB$L_WOR_PROT] = 0;
5                   ORB[ORB$L_OWNER] = 0;
5
5 ! Decrement the mount count on the AQB.  If it goes to zero, remove
5 ! this AQB from the list and remember to deallocate it after we're done
5 ! flushing buffers a little further on.
5 !
5
5                   AQB = .VCB [VCB$L_AQB];
5                   IF (AQB [AQB$B_MNTCNT] = .AQB [AQB$B_MNTCNT] - 1) NEQ 0
5                   THEN
5                       AQB = 0
5                   ELSE
6                       BEGIN
6                       LOCAL P : REF BBLOCK;
6
6                       P = .IOC$GL_AQBLIST;
6                       IF .P EQL .AQB
6                       THEN
6                           IOC$GL_AQBLIST = .AQB [AQB$L_LINK]
6                       ELSE
7                           BEGIN
7                           UNTIL .P [AQB$L_LINK] EQL .AQB
7                           DO P = .P [AQB$L_LINK];
7                           P [AQB$L_LINK] = .AQB [AQB$L_LINK];
6                           END;
5                       END;
5
5 ! Deallocate the remaining file control blocks and caches.
5 !
5
5                   UNTIL REMQUE (.VCB[VCB$L_FCBFL], FCB)
5                   DO
```

```
6                 BEGIN
6                 FCB [FCB$W_REFCNT] = 0;         ! force deq on conv_acclock
6                 CONV_ACCLOCK (0, .FCB);         ! deq access lock, if any
6                 IF .BBLOCK[FCB[FCB$R_ORB], ORB$V_ACL_QUEUE]
6                 THEN ACL_DELETEACL (FCB[FCB$L_ACLFL], 0); ! Delete the ACL
6                 UNTIL REMQUE (.FCB[FCB$L_WLFL], WCB) ! deallocate all window
6                 DO DEALLOCATE (.WCB);           ! segments
6                 DEALLOCATE (.FCB);              ! release all FCB's
5                 END;
5
5             CACHE = .VCB[VCB$L_CACHE];
5             IF .BBLOCK [.CACHE[VCA$L_FIDCACHE], VCA$L_FIDCLKID] NEQ 0
5             THEN DEQ_LOCK (.BBLOCK [.CACHE[VCA$L_FIDCACHE], VCA$L_FIDCLKID]);
5             IF .BBLOCK [.CACHE[VCA$L_EXTCACHE], VCA$L_EXTCLKID] NEQ 0
5             THEN DEQ_LOCK (.BBLOCK [.CACHE[VCA$L_EXTCACHE], VCA$L_EXTCLKID]);
5             DEALLOCATE (.VCB[VCB$L_CACHE]);     ! release the cache block
5
5             CACHE = .VCB[VCB$L_QUOCACHE];
5             IF .CACHE NEQ 0                     ! release quota cache if present
5             THEN
6                 BEGIN
6                 IF .CACHE[VCA$L_QUOCLKID] NEQ 0
6                 THEN DEQ_LOCK (.CACHE[VCA$L_QUOCLKID]);
6                 DEALLOCATE (.VCB[VCB$L_QUOCACHE]);
5                 END;
5
5 ! Dequeue the volume lock.
5 !
5
5             DEQ_LOCK (.VCB [VCB$L_VOLLKID]);
5
5             IF .RVT NEQ .CURRENT_UCB
5             THEN
6                 BEGIN
6                 VECTOR [RVT[RVT$L_UCBLST], .VCB[VCB$W_RVN]-1] = 0;
6                 RVT[RVT$W_REFC] = .RVT[RVT$W_REFC] - 1;
6                 IF .RVT[RVT$W_REFC] EQL 0
6                 THEN
7                     BEGIN
7
7                     DEQ_LOCK (.RVT[RVT$L_STRUCLKID]);
7
7 ! Dequeue blocking lock and disable blocking check on exit.
7 !
7
7                     IF .RVT[RVT$L_BLOCKID] NEQ 0
7                     THEN DEQ_LOCK (.RVT[RVT$L_BLOCKID]);
7                     BLOCK_CHECK = 0;
7
7                     DEALLOCATE (.RVT);
6                     END;
6                 END
5             ELSE
6                 BEGIN
6                 IF .VCB[VCB$L_BLOCKID] NEQ 0
6                 THEN DEQ_LOCK (.VCB[VCB$L_BLOCKID]);
6                 BLOCK_CHECK = 0;
```

```
   5                      END;
   5
   5              DEALLOCATE (.VCB);                      ! release the VCB
   5
   5      ! If the device lock exists, now demote it as appropriate (to CR if
   5      ! the device is not allocated, to EX otherwise). Clear the value
   5      ! block if this is the final dismount.
   5      !
   5
   5              IF .LKSTS [1] NEQ 0
   5              THEN
   6                  BEGIN
   6                  LOCAL LKFLGS;
   6                  LKFLGS = LCK$M_CONVERT + LCK$M_CVTSYS
   6                          + LCK$M_SYNCSTS + LCK$M_NOQUOTA;
   6
   6                  IF .LOCKCOUNT EQL 1
   6                  THEN
   7                      BEGIN
   7                      LKFLGS = .LKFLGS + LCK$M_VALBLK;
   7                      LKSTS [2] = 0;
   7                      LKSTS [3] = 0;
   7                      LKSTS [4] = 0;
   7                      LKSTS [5] = 0;
   6                      END;
   6
P  6                  STS = $ENQ (LKMODE = IF .UCB [UCB$L_PID] NEQ 0
P  6                                       THEN LCK$K_EXMODE
P  6                                       ELSE LCK$K_CRMODE,
P  6                              LKSB   = LKSTS,
P  6                              EFN    = EFN,
   6                              FLAGS  = .LKFLGS);
   6                  IF NOT .STS
   6                  OR NOT .LKSTS
   6                  THEN BUG_CHECK (XQPERR, FATAL, 'Unexpected lock manager error');
   5                  END;
   5
   5      ! Call IOC$DALLOC_DMT routine to deallocate the device when appropriate.
   5      !
   5
   5              IOC$DALLOC_DMT (.CTL$GL_PCB, .UCB);
   5
   5              UNLOCK_IODB ();
   5
   5              IF .AQB NEQ 0
   5              THEN
   6                  BEGIN
   6                  LOCAL P : REF BBLOCK;
   6                  P = .AQB [AQB$L_BUFCACHE];
   6                  EXE$DEAPGDSIZ (.P, .P [F11BC$L_REALSIZE]);
   6                  DEALLOCATE (.AQB);
   5                  END;
   5
   4              END;                                ! end of dismount processing
   4
   3          END;                                    ! end of dismount condition
   3
```

```
;  571       1560  3      IF .RVT EQL .CURRENT_UCB THEN EXITLOOP;
;  572       1561  3
;  573       1562  3      J = .J + 1;                         ! bump loop index
;  574       1563  3      END                                 ! end of multi-volume loop
;  575       1564  2  UNTIL .J GTRU .RVT_LENGTH;
;  576       1565  2
;  577       1566  1  END;                                    ! end of routine CHECK_DISMOUNT


                                                        .TITLE  CHKDMO
                                                        .IDENT  \V04-000\

                                                        .EXTRN  CTL$GL_PCB, CTL$GL_PHD
                                                        .EXTRN  IOC$GL_AQBLIST, CONV_ACCLOCK
                                                        .EXTRN  LOCK_COUNT, WAIT_FOR_AST
                                                        .EXTRN  CONTINUE_THREAD
                                                        .EXTRN  LOCK_IODB, UNLOCK_IODB
                                                        .EXTRN  DEQ_LOCK, DEALLOCATE
                                                        .EXTRN  SWITCH_CHANNEL, SEND_ERRLOG
                                                        .EXTRN  EXE$DEAPGDSIZ, IOC$DALLOC_DMT
                                                        .EXTRN  ACL_DELETEACL, SYS$QIO
                                                        .EXTRN  SYS$ENQ, BUG$_XQPERR

                                                        .PSECT  $LOCKEDC1$,NOWRT,2

                               0BFC 00000               .ENTRY  CHECK_DISMOUNT, Save R2,R3,R4,R5,R6,R7,R8,- ; 1161
                                                                R9,R11                                       ;
                  5E        30  C2 00002                SUBL2   #48, SP                                      ;
                  59    94  AA  9E 00005                MOVAB   -108(BASE), R9                               ; 1210
                  58        01  D0 00009                MOVL    #1, J                                        ; 1242
                  50    98  AA  D0 0000C                MOVL    -104(BASE), R0                               ; 1243
                  56    20  A0  D0 00010                MOVL    32(R0), RVT                                  ;
                  69        56  D1 00014                CMPL    RVT, (R9)                                    ; 1244
                            04  13 00017                BEQL    1$                                           ;
                  6E    0B  A6  9A 00019                MOVZBL  11(RVT), RVT_LENGTH                          ; 1245
                        04  AE  D4 0001D  1$:           CLRL    LOCKCOUNT                                    ; 1248
                  55        56  D0 00020                MOVL    RVT, UCB                                     ; 1265
                  69        55  D1 00023                CMPL    UCB, (R9)                                    ; 1267
                            05  13 00026                BEQL    2$                                           ;
                  55    40 A648 D0 00028                MOVL    64(RVT)[J], UCB                              ; 1268
                            55  D5 0002D  2$:           TSTL    UCB                                          ; 1273
                            2C  13 0002F                BEQL    4$                                           ;
    27        3A  A5        05  E1 00031                BBC     #5, 58(UCB), 4$                              ; 1274
                  69        55  D1 00036                CMPL    UCB, (R9)                                    ; 1281
                            07  13 00039                BEQL    3$                                           ;
                            55  DD 0003B                PUSHL   UCB                                          ; 1282
           0000G  CF        01  FB 0003D                CALLS   #1, SWITCH_CHANNEL                           ;
           0000G  CF        00  FB 00042  3$:           CALLS   #0, LOCK_IODB                                ; 1288
                  12        08  DA 00047                MTPR    #8, #18                                      ; 1289
                  54    1C  A5  D0 0004A                MOVL    28(UCB), ORB                                 ; 1291
                  53    34  A5  D0 0004E                MOVL    52(UCB), VCB                                 ; 1292
                  01    0C  A3  B1 00052                CMPW    12(VCB), #1                                  ; 1293
                            08  13 00056                BEQL    5$                                           ;
           0000G  CF        00  FB 00058                CALLS   #0, UNLOCK_IODB                              ; 1295
                          0281  31 0005D  4$:           BRW     34$                                          ;
              66  A5        10  88 00060  5$:           BISB2   #16, 102(UCB)                                ; 1303
           0000G  CF        00  FB 00064                CALLS   #0, UNLOCK_IODB                              ; 1304
```

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CHKDMO                                            E  8
V04-000                                   15-Sep-1984 23:59:22    VAX-11 Bliss-32 V4.0-742                    Page  12
                                          14-Sep-1984 12:30:10    DISK$VMSMASTER:[F11X.SRC]CHKDMO.B32;1        (2)

                                    55   DD 00069         PUSHL   UCB                                         ; 1309
                                    7E   D4 0006B         CLRL    -(SP)                                       ;
               0000G  CF            02   FB 0006D         CALLS   #2, SEND_ERRLOG                             ;
                      52 00000000G  00   D0 00072         MOVL    CTL$GL_PCB, PTR                             ; 1324
                                3E  A2   B6 00079         INCW    62(PTR)                                     ; 1325
                                38  A2   B6 0007C         INCW    56(PTR)                                     ; 1326
                  08  AE      0084  C2   7D 0007F         MOVQ    132(PTR), SAVE_PRIV                         ; 1327
                0086  C2      2040  8F   A8 00085         BISW2   #8256, 134(PTR)                             ; 1331
                      52 00000000G  00   D0 0008C         MOVL    CTL$GL_PHD, PTR                             ; 1333
                  10  AE            62   7D 00093         MOVQ    (PTR), SAVE_PRIV+8                          ; 1334
                  02  A2      2040  8F   A8 00097         BISW2   #8256, 2(PTR)                               ; 1337
                                    7E   7C 0009D         CLRQ    -(SP)                                       ; 1350
                                    7E   7C 0009F         CLRQ    -(SP)                                       ;
                                    7E   7C 000A1         CLRQ    -(SP)                                       ;
                                    5A   DD 000A3         PUSHL   BASE                                        ;
                         00000000G  00   9F 000A5         PUSHAB  CONTINUE_THREAD                             ;
                                    7E   D4 000AB         CLRL    -(SP)                                       ;
    04            64  A5            0C   E5 000AD         BBCC    #12, 100(UCB), 6$                           ;
                                    01   DD 000B2         PUSHL   #1                                          ;
                                    02   11 000B4         BRB     7$                                          ;
                                    11   DD 000B6 6$:     PUSHL   #17                                         ;
                              FF78  CA   DD 000B8 7$:     PUSHL   -136(BASE)                                  ;
                                    1E   DD 000BC         PUSHL   #30                                         ;
           00000000G  00            0C   FB 000BE         CALLS   #12, SYS$QIO                                ;
                      62        10  AE   7D 000C5         MOVQ    SAVE_PRIV+8, (PTR)                          ; 1352
                      52 00000000G  00   D0 000C9         MOVL    CTL$GL_PCB, PTR                             ; 1354
                                3E  A2   B7 000D0         DECW    62(PTR)                                     ; 1355
                                38  A2   B7 000D3         DECW    56(PTR)                                     ; 1356
                0084  C2        08  AE   7D 000D6         MOVQ    SAVE_PRIV, 132(PTR)                         ; 1357
                      07            50   E9 000DC         BLBC    QIOSTAT, 8$                                 ; 1360
           00000000G  00            00   FB 000DF         CALLS   #0, WAIT_FOR_AST                            ; 1361
                  1C  AE        20  A5   D0 000E6 8$:     MOVL    32(UCB), LKSTS+4                            ; 1370
                                    4B   13 000EB         BEQL    12$                                         ;
                                2C  A5   D5 000ED         TSTL    44(UCB)                                     ; 1371
                                    46   12 000F0         BNEQ    12$                                         ;
                                    7E   7C 000F2         CLRQ    -(SP)                                       ; 1380
                                    7E   D4 000F4         CLRL    -(SP)                                       ;
                                    5A   DD 000F6         PUSHL   BASE                                        ;
                         00000000G  00   9F 000F8         PUSHAB  CONTINUE_THREAD                             ;
                                    7E   7C 000FE         CLRQ    -(SP)                                       ;
                                    2A   DD 00100         PUSHL   #42                                         ;
                                38  AE   9F 00102         PUSHAB  LKSTS                                       ;
                                    04   DD 00105         PUSHL   #4                                          ;
                                    1E   DD 00107         PUSHL   #30                                         ;
           00000000G  00            0B   FB 00109         CALLS   #11, SYS$ENQ                                ;
                      5B            50   D0 00110         MOVL    R0, STS                                     ;
                      01            5B   B1 00113         CMPW    STS, #1                                     ; 1382
                                    07   12 00116         BNEQ    9$                                          ;
           00000000G  00            00   FB 00118         CALLS   #0, WAIT_FOR_AST                            ; 1383
                      04            5B   E9 0011F 9$:     BLBC    STS, 10$                                    ; 1384
                      04        18  AE   E8 00122         BLBS    LKSTS, 11$                                  ; 1385
                                      FEFF 00126 10$:     BUGW                                                ; 1386
                                     0000* 00128          .WORD   <BUG$_XQPERR!4>                             ;
                                7C  A3   DD 0012A 11$:    PUSHL   124(VCB)                                    ; 1391
               0000G  CF            01   FB 0012D         CALLS   #1, LOCK_COUNT                              ;
                  04  AE            50   D0 00132         MOVL    R0, LOCKCOUNT                               ;
                                    04   11 00136         BRB     13$                                         ; 1370
```

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CHKDMO                                            F 8
V04-000                             15-Sep-1984 23:59:22   VAX-11 Bliss-32 V4.0-742                     Page  13
                                    14-Sep-1984 12:30:10   DISK$VMSMASTER:[F11X.SRC]CHKDMO.B32;1         (2)

              04  AE               01  D0 00138 12$:   MOVL    #1, LOCKCOUNT                          ; 1394
           0000G  CF               00  FB 0013C 13$:   CALLS   #0, LOCK_IODB                          ; 1402
            00AD  C5       80      8F  8A 00141        BICB2   #128, 173(UCB)                         ; 1403
              3A  A5     0228      8F  AA 00147        BICW2   #552, 58(UCB)                          ; 1406
                           5C      A5  B7 0014D        DECW    92(UCB)                                ; 1407
              66  A5               10  8A 00150        BICB2   #16, 102(UCB)                          ; 1408
                           34      A5  D4 00154        CLRL    52(UCB)                                ; 1409
                           18      A4  7C 00157        CLRQ    24(ORB)                                ; 1410
                           20      A4  7C 0015A        CLRQ    32(ORB)                                ; 1412
                                   64  D4 0015D        CLRL    (ORB)                                  ; 1414
                  57       10      A3  D0 0015F        MOVL    16(VCB), AQB                           ; 1421
                  50       0B      A7  9A 00163        MOVZBL  11(AQB), R0                            ; 1422
                                   50  D7 00167        DECL    R0                                     ;
              0B  A7               50  90 00169        MOVB    R0, 11(AQB)                            ;
                                   50  D5 0016D        TSTL    R0                                     ;
                                   04  13 0016F        BEQL    14$                                    ;
                                   57  D4 00171        CLRL    AQB                                    ; 1424
                                   27  11 00173        BRB     17$                                    ;
                  50 00000000G     9F  D0 00175 14$:   MOVL    @#IOC$GL_AQBLIST, P                    ; 1429
                  57               50  D1 0017C        CMPL    P, AQB                                 ; 1430
                                   0A  12 0017F        BNEQ    15$                                    ;
       00000000G  9F       10      A7  D0 00181        MOVL    16(AQB), @#IOC$GL_AQBLIST              ; 1432
                                   11  11 00189        BRB     17$                                    ;
                  57       10      A0  D1 0018B 15$:   CMPL    16(P), AQB                             ; 1435
                                   06  13 0018F        BEQL    16$                                    ;
                  50       10      A0  D0 00191        MOVL    16(P), P                               ; 1436
                                   F4  11 00195        BRB     15$                                    ;
              10  A0       10      A7  D0 00197 16$:   MOVL    16(AQB), 16(P)                         ; 1437
                  52       00      B3  0F 0019C 17$:   REMQUE  @0(VCB), FCB                           ; 1444
                                   34  1D 001A0        BVS     20$                                    ;
                           18      A2  B4 001A2        CLRW    24(FCB)                                ; 1447
                                   52  DD 001A5        PUSHL   FCB                                    ; 1448
                                   7E  D4 001A7        CLRL    -(SP)                                  ;
           0000G  CF               02  FB 001A9        CALLS   #2, CONV_ACCLOCK                       ;
  0B          63  A2               01  E1 001AE        BBC     #1, 99(FCB), 18$                       ; 1449
                                   7E  D4 001B3        CLRL    -(SP)                                  ; 1450
                         0080      C2  9F 001B5        PUSHAB  128(FCB)                               ;
           0000G  CF               02  FB 001B9        CALLS   #2, ACL_DELETEACL                      ;
                  54       10      B2  0F 001BE 18$:   REMQUE  @16(FCB), WCB                          ; 1451
                                   09  1D 001C2        BVS     19$                                    ;
                                   54  DD 001C4        PUSHL   WCB                                    ; 1452
           0000G  CF               01  FB 001C6        CALLS   #1, DEALLOCATE                         ;
                                   F1  11 001CB        BRB     18$                                    ;
                                   52  DD 001CD 19$:   PUSHL   FCB                                    ; 1453
           0000G  CF               01  FB 001CF        CALLS   #1, DEALLOCATE                         ;
                                   C6  11 001D4        BRB     17$                                    ; 1444
                  52       58      A3  D0 001D6 20$:   MOVL    88(VCB), CACHE                         ; 1456
                  50               62  D0 001DA        MOVL    (CACHE), R0                            ; 1457
                           04      A0  D5 001DD        TSTL    4(R0)                                  ;
                                   08  13 001E0        BEQL    21$                                    ;
                           04      A0  DD 001E2        PUSHL   4(R0)                                  ; 1458
           0000G  CF               01  FB 001E5        CALLS   #1, DEQ_LOCK                           ;
                  50       04      A2  D0 001EA 21$:   MOVL    4(CACHE), R0                           ; 1459
                           0C      A0  D5 001EE        TSTL    12(R0)                                 ;
                                   08  13 001F1        BEQL    22$                                    ;
                           0C      A0  DD 001F3        PUSHL   12(R0)                                 ; 1460
           0000G  CF               01  FB 001F6        CALLS   #1, DEQ_LOCK                           ;
```

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CHKDMO                                                              G  8
V04-000                                                     15-Sep-1984 23:59:22    VAX-11 Bliss-32 V4.0-742                Page  14
                                                            14-Sep-1984 12:30:10    DISK$VMSMASTER:[F11X.SRC]CHKDMO.B32;1    (2)

                               58    A3   DD 001FB 22$:     PUSHL    88(VCB)                                              ; 1461
          0000G   CF                 01   FB 001FE          CALLS    #1, DEALLOCATE                                       ;
                  52           5C    A3   D0 00203          MOVL     92(VCB), CACHE                                       ; 1463
                                     15   13 00207          BEQL     24$                                                  ; 1464
                               04    A2   D5 00209          TSTL     4(CACHE)                                             ; 1467
                                     08   13 0020C          BEQL     23$                                                  ;
                               04    A2   DD 0020E          PUSHL    4(CACHE)                                             ; 1468
          0000G   CF                 01   FB 00211          CALLS    #1, DEQ_LOCK                                         ;
                               5C    A3   DD 00216 23$:     PUSHL    92(VCB)                                              ; 1469
          0000G   CF                 01   FB 00219          CALLS    #1, DEALLOCATE                                       ;
                               7C    A3   DD 0021E 24$:     PUSHL    124(VCB)                                             ; 1475
          0000G   CF                 01   FB 00221          CALLS    #1, DEQ_LOCK                                         ;
                  69                 56   D1 00226          CMPL     RVT, (R9)                                            ; 1477
                                     2D   13 00229          BEQL     26$                                                  ;
                  50           0E    A3   3C 0022B          MOVZWL   14(VCB), R0                                          ; 1480
                               40  A640   D4 0022F          CLRL     64(RVT)[R0]                                          ;
                               04    A6   B7 00233          DECW     4(RVT)                                               ; 1481
                                     31   12 00236          BNEQ     28$                                                  ; 1482
                                     66   DD 00238          PUSHL    (RVT)                                                ; 1486
          0000G   CF                 01   FB 0023A          CALLS    #1, DEQ_LOCK                                         ;
                               24    A6   D5 0023F          TSTL     36(RVT)                                              ; 1491
                                     08   13 00242          BEQL     25$                                                  ;
                               24    A6   DD 00244          PUSHL    36(RVT)                                              ; 1492
          0000G   CF                 01   FB 00247          CALLS    #1, DEQ_LOCK                                         ;
                               A7    AA   94 0024C 25$:     CLRB     -89(BASE)                                            ; 1493
                                     56   DD 0024F          PUSHL    RVT                                                  ; 1495
          0000G   CF                 01   FB 00251          CALLS    #1, DEALLOCATE                                       ;
                                     11   11 00256          BRB      28$                                                  ; 1477
                  50         008C    C3   D0 00258 26$:     MOVL     140(VCB), R0                                         ; 1500
                                     07   13 0025D          BEQL     27$                                                  ;
                                     50   DD 0025F          PUSHL    R0                                                   ; 1501
          0000G   CF                 01   FB 00261          CALLS    #1, DEQ_LOCK                                         ;
                               A7    AA   94 00266 27$:     CLRB     -89(BASE)                                            ; 1502
                                     53   DD 00269 28$:     PUSHL    VCB                                                  ; 1505
          0000G   CF                 01   FB 0026B          CALLS    #1, DEALLOCATE                                       ;
                               1C    AE   D5 00270          TSTL     LKSTS+4                                              ; 1512
                                     41   13 00273          BEQL     33$                                                  ;
                  50           6A    8F   9A 00275          MOVZBL   #106, LKFLGS                                         ; 1517
                  01           04    AE   D1 00279          CMPL     LOCKCOUNT, #1                                        ; 1519
                                     08   12 0027D          BNEQ     29$                                                  ;
                                     50   D6 0027F          INCL     LKFLGS                                               ; 1522
                               20    AE   7C 00281          CLRQ     LKSTS+8                                              ; 1523
                               28    AE   7C 00284          CLRQ     LKSTS+16                                             ; 1525
                                     7E   7C 00287 29$:     CLRQ     -(SP)                                                ; 1534
                                     7E   7C 00289          CLRQ     -(SP)                                                ;
                                     7E   7C 0028B          CLRQ     -(SP)                                                ;
                                     7E   D4 0028D          CLRL     -(SP)                                                ;
                                     50   DD 0028F          PUSHL    LKFLGS                                               ;
                               38    AE   9F 00291          PUSHAB   LKSTS                                                ;
                               2C    A5   D5 00294          TSTL     44(UCB)                                              ;
                                     04   13 00297          BEQL     30$                                                  ;
                                     05   DD 00299          PUSHL    #5                                                   ;
                                     02   11 0029B          BRB      31$                                                  ;
                                     01   DD 0029D 30$:     PUSHL    #1                                                   ;
                                     1E   DD 0029F 31$:     PUSHL    #30                                                  ;
      00000000G   00                 0B   FB 002A1          CALLS    #11, SYS$ENQ                                         ;
                  5B                 50   D0 002A8          MOVL     R0, STS                                              ;
```

```
                                 04            5B  E9 002AB        BLBC    STS, 32$                                        ; 1535
                                 04      18    AE  E8 002AE        BLBS    LKSTS, 33$                                      ; 1536
                                             FEFF  002B2 32$:      BUGW                                                    ; 1537
                                            0000*  002B4           .WORD   <BUG$_XQPERR!4>                                 ;
                                 54 00000000G  00  D0 002B6 33$:   MOVL    CTL$GL_PCB, R4                                  ; 1543
                                    00000000G  00  16 002BD        JSB     IOC$DALLOC_DMT                                  ;
                           0000G  CF               00  FB 002C3        CALLS   #0, UNLOCK_IODB                                 ; 1545
                                               57  D5 002C8        TSTL    AQB                                             ; 1547
                                               15  13 002CA        BEQL    34$                                             ;
                                 50      18    A7  D0 002CC        MOVL    24(AQB), P                                      ; 1551
                                 51      0C    A0  D0 002D0        MOVL    12(P), R1                                       ; 1552
                                    00000000G  00  16 002D4        JSB     EXE$DEAPGDSIZ                                   ;
                                               57  DD 002DA        PUSHL   AQB                                             ; 1553
                           0000G  CF               01  FB 002DC        CALLS   #1, DEALLOCATE                                  ;
                                 69            56  D1 002E1 34$:   CMPL    RVT, (R9)                                       ; 1560
                                               0A  13 002E4        BEQL    35$                                             ;
                                               58  D6 002E6        INCL    J                                               ; 1562
                                 6E            58  D1 002E8        CMPL    J, RVT_LENGTH                                   ; 1564
                                               03  1A 002EB        BGTRU   35$                                             ;
                                         FD2D  31 002ED        BRW     1$                                              ;
                                               04 002F0 35$:   RET                                                     ; 1566

; Routine Size:  753 bytes,    Routine Base:  $LOCKEDC1$ + 0000
```

```
1 GLOBAL ROUTINE UPDATE_DIRSEQ : L_NORM =
1
1 !++
1 !
1 ! FUNCTIONAL DESCRIPTION:
1 !
1 !       This routine bumps the directory sequence count in the UCB to invalidate
1 !       RMS directory caches on the volume.
1 !
1 !
1 ! CALLING SEQUENCE:
1 !       UPDATE_DIRSEQ ()
1 !
1 ! INPUT PARAMETERS:
1 !       NONE
1 !
1 ! IMPLICIT INPUTS:
1 !       CURRENT_UCB: UCB of device in use
1 !       CURRENT_RVT:
1 !         NVOLS: number of volumes in volume set
1 !         UCBLST: addresses of UCB's in volume set
1 !
1 ! OUTPUT PARAMETERS:
1 !       NONE
1 !
1 ! IMPLICIT OUTPUTS:
1 !       directory sequence count incremented
1 !
1 ! ROUTINE VALUE:
1 !       1
1 !
1 ! SIDE EFFECTS:
1 !       NONE
1 !
1 !--
1
2 BEGIN
2
2 BIND_COMMON;
2
2 EXTERNAL ROUTINE
2       ALLOCATION_LOCK : L_NORM NOVALUE,
2       ALLOCATION_UNLOCK : L_NORM NOVALUE,
2       SWITCH_VOLUME   : L_NORM NOVALUE,
2       QEX_N_CANCEL    : L_NORM;
2
2 LOCAL
2       CURRVN,
2       HAD_LOCK,
2       VCB             : REF BBLOCK,   ! VCB address
2       UCB             : REF BBLOCK;   ! UCB address
2
2 ! Iterate over the mounted volumes of a volume set if there is one.
2 !
2
2 CURRVN = .CURRENT_RVN;
2
```

```
;  636          1624  2 HAD_LOCK = 0;
;  637          1625  2
;  638          1626  2 IF .LB_LOCKID [0] NEQ 0
;  639          1627  2 THEN
;  640          1628  2     HAD_LOCK = 1
;  641          1629  2 ELSE
;  642          1630  2     ALLOCATION_LOCK ();
;  643          1631  2
;  644          1632  2 UCB = .CURRENT_UCB;
;  645          1633  2 IF .CURRENT_RVT NEQ .UCB
;  646          1634  2 THEN
;  647          1635  3     BEGIN
;  648          1636  3     INCR J FROM 1 TO .CURRENT_RVT[RVT$B_NVOLS]
;  649          1637  3     DO
;  650          1638  4         BEGIN
;  651          1639  4         VCB = 0;
;  652          1640  4         UCB = .VECTOR [CURRENT_RVT[RVT$L_UCBLST], .J-1];
;  653          1641  4         IF .UCB NEQ 0
;  654          1642  4         THEN
;  655          1643  4             IF (VCB = .UCB [UCB$L_VCB]) NEQ 0
;  656          1644  4             THEN
;  657          1645  5                 BEGIN
;  658          1646  5                 SWITCH_VOLUME (.J);
;  659          1647  5                 QEX_N_CANCEL (.LB_LOCKID [0]);
;  660          1648  4                 END;
;  661          1649  3         END;
;  662          1650  3     SWITCH_VOLUME (.CURRVN);
;  663          1651  3     END
;  664          1652  2 ELSE
;  665          1653  2     QEX_N_CANCEL (.LB_LOCKID [0]);
;  666          1654  2
;  667          1655  2 IF NOT .HAD_LOCK
;  668          1656  2 THEN
;  669          1657  2     ALLOCATION_UNLOCK ();
;  670          1658  2
;  671          1659  2 RETURN 1;
;  672          1660  2
;  673          1661  1 END;                                        ! end of routine UPDATE_DIRSEQ


                                                              .EXTRN  ALLOCATION_LOCK
                                                              .EXTRN  ALLOCATION_UNLOCK
                                                              .EXTRN  SWITCH_VOLUME, QEX_N_CANCEL

                                          00FC 00000          .ENTRY  UPDATE_DIRSEQ, Save R2,R3,R4,R5,R6,R7       ; 1567
                    57        A0    AA    D0 00002            MOVL    -96(BASE), CURRVN                           ; 1622
                                    56    D4 00006            CLRL    HAD_LOCK                                    ; 1624
                              6C    AA    D5 00008            TSTL    108(BASE)                                   ; 1626
                                    05    13 0000B            BEQL    1$                                          ;
                    56              01    D0 0000D            MOVL    #1, HAD_LOCK                                ; 1628
                                    05    11 00010            BRB     2$                                          ;
           00000G   CF              00    FB 00012  1$:       CALLS   #0, ALLOCATION_LOCK                         ; 1630
                    53        94    AA    D0 00017  2$:       MOVL    -108(BASE), UCB                             ; 1632
                    50        9C    AA    D0 0001B            MOVL    -100(BASE), R0                              ; 1633
                    53              50    D1 0001F            CMPL    R0, UCB                                     ;
                                    37    13 00022            BEQL    5$                                          ;
```

```
                     55        0B   A0   9A 00024        MOVZBL  11(R0), R5                               ; 1636
                                    52   D4 00028        CLRL    J
                                    22   11 0002A        BRB     4$
                                    54   D4 0002C 3$:    CLRL    VCB                                      ; 1639
                     50        9C BA42   DE 0002E        MOVAL   @-100(BASE)[J], R0                       ; 1640
                     53        40   A0   D0 00033        MOVL    64(R0), UCB
                                    15   13 00037        BEQL    4$                                       ; 1641
                     54        34   A3   D0 00039        MOVL    52(UCB), VCB                             ; 1643
                                    0F   13 0003D        BEQL    4$
                                    52   DD 0003F        PUSHL   J                                        ; 1646
               0000G CF             01   FB 00041        CALLS   #1, SWITCH_VOLUME
                               6C   AA   DD 00046        PUSHL   108(BASE)                                ; 1647
               0000G CF             01   FB 00049        CALLS   #1, QEX_N_CANCEL
          DA         52             55   F3 0004E 4$:    AOBLEQ  R5, J, 3$                                ; 1636
                                    57   DD 00052        PUSHL   CURRVN                                   ; 1650
               0000G CF             01   FB 00054        CALLS   #1, SWITCH_VOLUME
                                    08   11 00059        BRB     6$                                       ; 1633
                               6C   AA   DD 0005B 5$:    PUSHL   108(BASE)                                ; 1653
               0000G CF             01   FB 0005E        CALLS   #1, QEX_N_CANCEL
                     05             56   E8 00063 6$:    BLBS    HAD_LOCK, 7$                             ; 1655
               0000G CF             00   FB 00066        CALLS   #0, ALLOCATION_UNLOCK                    ; 1657
                     50             01   D0 0006B 7$:    MOVL    #1, R0                                   ; 1659
                                         04 0006E        RET                                              ; 1661

; Routine Size:  111 bytes,    Routine Base:  $LOCKEDC1$ + 02F1


;  674          1662  1
;  675          1663  1 END
;  676          1664  0 ELUDOM




;                               PSECT SUMMARY
;
;       Name                  Bytes                       Attributes
;
;   $LOCKEDC1$                     864  NOVEC,NOWRT,  RD ,  EXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)



;                           Library Statistics
;
;                                        -------- Symbols --------      Pages       Processing
;       File                             Total    Loaded   Percent      Mapped      Time
;
;   _$255$DUA28:[SYSLIB]LIB.L32;1        18619        84         0      1000          00:02.0
;                                   COMMAND QUALIFIERS

;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:CHKDMO/OBJ=OBJ$:CHKDMO MSRC$:CHKDMO/UPDATE=(ENH$:CHKDMO)

; Size:          864 code + 0 data bytes
; Run Time:         00:40.4
; Elapsed Time:     01:11.8
; Lines/CPU Min:      2473
; Lexemes/CPU-Min: 45046
; Memory Used:  405 pages
; Compilation Complete
```

0168 AH-BT13A-SE
VAX/VMS V4.0

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